

## SEQUENCE LISTING

<110> Brett P. Monia  
Jacqueline Wyatt

<120> ANTISENSE MODULATION OF FIBROBLAST GROWTH FACTOR RECEPTOR 3  
EXPRESSION

<130> RTS-0157

<160> 95

<210> 1  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 1  
tccgtcatcg ctcctcaggg

20

<210> 2  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 2  
atgcattctg cccccaagga

20

<210> 3

<211> 2520

<212> DNA

<213> *Homo sapiens*

<220>

<220>

<221> CDS

<222> (40) . . . (2460)

<400> 3

cgcgcgctgc ctgaggacgc cgcgcccccc gcccccgcc atg ggc gcc cct gcc  
Met Gly Ala Pro Ala  
1 5

54

tgc gcc ctc gcg ctc tgc gtg gcc gtg gcc atc gtg gcc ggc gcc tcc  
Cys Ala Leu Ala Leu Cys Val Ala Val Ala Ile Val Ala Gly Ala Ser  
10 15 20

102

tcg gag tcc ttg ggg acg gag cag cgc gtc gtg ggg cga gcg gca gaa  
Ser Glu Ser Leu Gly Thr Glu Gln Arg Val Val Gly Arg Ala Ala Glu  
25 30 35

150

gtc ccg ggc cca gag ccc ggc cag cag gag cag ttg gtc ttc ggc agc  
Val Pro Gly Pro Glu Pro Gly Gln Gln Glu Gln Leu Val Phe Gly Ser  
40 45 50

198

ggg gat gct gtg gag ctg agc tgt ccc ccc ggg ggt ggt ccc atg  
Gly Asp Ala Val Glu Leu Ser Cys Pro Pro Pro Gly Gly Gly Pro Met  
55 60 65

246

ggg ccc act gtc tgg gtc aag gat ggc aca ggg ctg gtg ccc tcg gag  
Gly Pro Thr Val Trp Val Lys Asp Gly Thr Gly Leu Val Pro Ser Glu  
70 75 80 85

294

cgt gtc ctg gtg ggg ccc cag cgg ctg cag gtg ctg aat gcc tcc cac  
 Arg Val Leu Val Gly Pro Gln Arg Leu Gln Val Leu Asn Ala Ser His  
 90 95 100

342

gag gac tcc ggg gcc tac agc tgc cgg cag cgg ctc acg cag cgc gta  
 Glu Asp Ser Gly Ala Tyr Ser Cys Arg Gln Arg Leu Thr Gln Arg Val  
                   105                  110                  115

390

ctg tgc cac ttc agt gtg cggtg aca gac gct cca tcc tcg gga gat

Leu Cys His Phe Ser Val Arg Val Thr Asp Ala Pro Ser Ser Gly Asp  
 120 125 130

gac gaa gac ggg gag gac gag gct gag gac aca ggt gtg gac aca ggg 486  
 Asp Glu Asp Gly Glu Asp Glu Ala Glu Asp Thr Gly Val Asp Thr Gly  
 135 140 145

gcc cct tac tgg aca cgg ccc gag cgg atg gac aag aag ctg ctg gcc 534  
 Ala Pro Tyr Trp Thr Arg Pro Glu Arg Met Asp Lys Lys Leu Leu Ala  
 150 155 160 165

gtg ccg gcc gcc aac acc gtc cgc ttc cgc tgc cca gcc gct ggc aac 582  
 Val Pro Ala Ala Asn Thr Val Arg Phe Arg Cys Pro Ala Ala Gly Asn  
 170 175 180

ccc act ccc tcc atc tcc tgg ctg aag aac ggc agg gag ttc cgc ggc 630  
 Pro Thr Pro Ser Ile Ser Trp Leu Lys Asn Gly Arg Glu Phe Arg Gly  
 185 190 195

gag cac cgc att gga ggc atc aag ctg cgg cat cag cag tgg agc ctg 678  
 Glu His Arg Ile Gly Gly Ile Lys Leu Arg His Gln Gln Trp Ser Leu  
 200 205 210

gtc atg gaa agc gtg gtg ccc tcg gac cgc ggc aac tac acc tgc gtc 726  
 Val Met Glu Ser Val Val Pro Ser Asp Arg Gly Asn Tyr Thr Cys Val  
 215 220 225

gtg gag aac aag ttt ggc agc atc cgg cag acg tac acg ctg gac gtg 774  
 Val Glu Asn Lys Phe Gly Ser Ile Arg Gln Thr Tyr Thr Leu Asp Val  
 230 235 240 245

ctg gag cgc tcc ccc cac cgg ccc atc ctg cag gcg ggg ctg ccg gcc 822  
 Leu Glu Arg Ser Pro His Arg Pro Ile Leu Gln Ala Gly Leu Pro Ala  
 250 255 260

aac cag acg gcg gtg ctg ggc agc gac gtg gag ttc cac tgc aag gtg 870  
 Asn Gln Thr Ala Val Leu Gly Ser Asp Val Glu Phe His Cys Lys Val  
 265 270 275

tac agt gac gca cag ccc cac atc cag tgg ctc aag cac gtg gag gtg 918  
 Tyr Ser Asp Ala Gln Pro His Ile Gln Trp Leu Lys His Val Glu Val  
 280 285 290

aac ggc agc aag gtg ggc ccg gac ggc aca ccc tac gtt acc gtg ctc 966

Asn Gly Ser Lys Val Gly Pro Asp Gly Thr Pro Tyr Val Thr Val Leu  
295 300 305

aag acg gcg ggc gct aac acc acc gac aag gag cta gag gtt ctc tcc 1014  
Lys Thr Ala Gly Ala Asn Thr Thr Asp Lys Glu Leu Glu Val Leu Ser  
310 315 320 325

ttg cac aac gtc acc ttt gag gac gcc ggg gag tac acc tgc ctg gcg 1062  
Leu His Asn Val Thr Phe Glu Asp Ala Gly Glu Tyr Thr Cys Leu Ala  
330 335 340

ggc aat tct att ggg ttt tct cat cac tct gcg tgg ctg gtg gtg ctg 1110  
Gly Asn Ser Ile Gly Phe Ser His His Ser Ala Trp Leu Val Val Leu  
345 350 355

cca gcc gag gag gag ctg gtg gag gct gac gag gcg ggc agt gtg tat 1158  
Pro Ala Glu Glu Glu Leu Val Glu Ala Asp Glu Ala Gly Ser Val Tyr  
360 365 370

gca ggc atc ctc agc tac ggg gtg ggc ttc ttc ctg ttc atc ctg gtg 1206  
Ala Gly Ile Leu Ser Tyr Gly Val Gly Phe Phe Leu Phe Ile Leu Val  
375 380 385

gtg gcg gct gtg acg ctc tgc cgc ctg cgc agc ccc ccc aag aaa ggc 1254  
Val Ala Ala Val Thr Leu Cys Arg Leu Arg Ser Pro Pro Lys Lys Gly  
390 395 400 405

ctg ggc tcc ccc acc gtg cac aag atc tcc cgc ttc ccg ctc aag cga 1302  
Leu Gly Ser Pro Thr Val His Lys Ile Ser Arg Phe Pro Leu Lys Arg  
410 415 420

cag gtg tcc ctg gag tcc aac gcg tcc atg agc tcc aac aca cca ctg 1350  
Gln Val Ser Leu Glu Ser Asn Ala Ser Met Ser Ser Asn Thr Pro Leu  
425 430 435

gtg cgc atc gca agg ctg tcc tca ggg gag ggc ccc acg ctg gcc aat 1398  
Val Arg Ile Ala Arg Leu Ser Ser Gly Glu Gly Pro Thr Leu Ala Asn  
440 445 450

gtc tcc gag ctc gag ctg cct gcc gac ccc aaa tgg gag ctg tct cgg 1446  
Val Ser Glu Leu Glu Leu Pro Ala Asp Pro Lys Trp Glu Leu Ser Arg  
455 460 465

gcc cgg ctg acc ctg ggc aag ccc ctt ggg gag ggc tgc ttc ggc cag 1494

Ala Arg Leu Thr Leu Gly Lys Pro Leu Gly Glu Gly Cys Phe Gly Gln 470 475 480 485  
 Val Val Met Ala Glu Ala Ile Gly Ile Asp Lys Asp Arg Ala Ala Lys 490 495 500  
 1542

Pro Val Thr Val Ala Val Lys Met Leu Lys Asp Asp Ala Thr Asp Lys 505 510 515  
 1590

Asp Leu Ser Asp Leu Val Ser Glu Met Glu Met Met Lys Met Ile Gly 520 525 530  
 1638

Lys His Lys Asn Ile Ile Asn Leu Leu Gly Ala Cys Thr Gln Gly Gly 535 540 545  
 1686

Pro Leu Tyr Val Leu Val Glu Tyr Ala Ala Lys Gly Asn Leu Arg Glu 550 555 560 565  
 1734

Phe Leu Arg Ala Arg Pro Pro Gly Leu Asp Tyr Ser Phe Asp Thr 570 575 580  
 1782

Cys Lys Pro Pro Glu Glu Gln Leu Thr Phe Lys Asp Leu Val Ser Cys 585 590 595  
 1830

Ala Tyr Gln Val Ala Arg Gly Met Glu Tyr Leu Ala Ser Gln Lys Cys 600 605 610  
 1878

Ile His Arg Asp Leu Ala Ala Arg Asn Val Leu Val Thr Glu Asp Asn 615 620 625  
 1926

Val Met Lys Ile Ala Asp Phe Gly Leu Ala Arg Asp Val His Asn Leu 630 635 640 645  
 1974

Gac Tac Tac Aag Aag Aca Acc Aac Ggc Cgg Ctg Ccc Gtg Aag Tgg Atg 2022

|   |     |     |      |
|---|-----|-----|------|
| Asp Tyr Tyr Lys Lys Thr Thr Asn Gly Arg Leu Pro Val Lys Trp Met |     |     |      |
| 650   | 655 | 660 |      |
| gct cct gag gcc ttg ttt gac cga gtc tac act cac cag agt gac gtc |     |     | 2070 |
| Ala Pro Glu Ala Leu Phe Asp Arg Val Tyr Thr His Gln Ser Asp Val |     |     |      |
| 665   | 670 | 675 |      |
| tgg tcc ttt ggg gtc ctg ctc tgg gag atc ttc acg ctg ggg ggc tcc |     |     | 2118 |
| Trp Ser Phe Gly Val Leu Leu Trp Glu Ile Phe Thr Leu Gly Gly Ser |     |     |      |
| 680   | 685 | 690 |      |
| ccg tac ccc ggc atc cct gtg gag gag ctc ttc aag ctg ctg aag gag |     |     | 2166 |
| Pro Tyr Pro Gly Ile Pro Val Glu Glu Leu Phe Lys Leu Leu Lys Glu |     |     |      |
| 695   | 700 | 705 |      |
| ggc cac cgc atg gac aag ccc gcc aac tgc aca cac gac ctg tac atg |     |     | 2214 |
| Gly His Arg Met Asp Lys Pro Ala Asn Cys Thr His Asp Leu Tyr Met |     |     |      |
| 710   | 715 | 720 | 725  |
| atc atg cgg gag tgc tgg cat gcc gcg ccc tcc cag agg ccc acc ttc |     |     | 2262 |
| Ile Met Arg Glu Cys Trp His Ala Ala Pro Ser Gln Arg Pro Thr Phe |     |     |      |
| 730   | 735 | 740 |      |
| aag cag ctg gtg gag gac ctg gac cgt gtc ctt acc gtg acg tcc acc |     |     | 2310 |
| Lys Gln Leu Val Glu Asp Leu Asp Arg Val Leu Thr Val Thr Ser Thr |     |     |      |
| 745   | 750 | 755 |      |
| gac gag tac ctg gac ctg tcg gcg cct ttc gag cag tac tcc ccg ggt |     |     | 2358 |
| Asp Glu Tyr Leu Asp Leu Ser Ala Pro Phe Glu Gln Tyr Ser Pro Gly |     |     |      |
| 760   | 765 | 770 |      |
| ggc cag gac acc ccc agc tcc agc tcc tca ggg gac gac tcc gtg ttt |     |     | 2406 |
| Gly Gln Asp Thr Pro Ser Ser Ser Ser Gly Asp Asp Ser Val Phe     |     |     |      |
| 775   | 780 | 785 |      |
| gcc cac gac ctg ctg ccc ccg gcc cca ccc agc agt ggg ggc tcg cgg |     |     | 2454 |
| Ala His Asp Leu Leu Pro Pro Ala Pro Pro Ser Ser Gly Gly Ser Arg |     |     |      |
| 790   | 795 | 800 | 805  |
| acg tga agggccactg gtccccaaca atgtgagggg tcccttagcag ccctccctgc |     |     | 2510 |
| Thr   |     |     |      |
| tgctggtgca  |     |     | 2520 |

<210> 4  
<211> 17  
<212> DNA  
<213> Artificial Sequence

<220>

<223> PCR Primer

<400> 4  
ggccatcgcc attgaca

17

<210> 5  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>

<223> PCR Primer

<400> 5  
ggcatcgatct ttcagcatct t

21

<210> 6  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>

<223> PCR Probe

<400> 6  
ccgccaagcc tgtcaccgta gc

22

<210> 7  
<211> 19  
<212> DNA

<213> Artificial Sequence

<220>

<223> PCR Primer

<400> 7

gaaggtgaag gtcggagtc

19

<210> 8

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR Primer

<400> 8

gaagatggtg atgggatttc

20

<210> 9

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR Probe

<400> 9

caagcttccc gttctcagcc

20

<210> 10

<211> 3829

<212> DNA

<213> Homo sapiens

<220>

<400> 10  
aaggatggca cagggctggc gccctcgag cgtgtcctgg tggggcccca gcggctgcag 60  
gtgctgaatg cctccacga ggactccggg gcctacagct gccggcagcg gctcacgcag 120  
cgctactgt gccacttcag tgtgcgggtg acagacgctc catcctcggg agatgacgaa 180  
gacggggagg acgaggctga ggacacaggt gtggacacag gggcccctta ctggacacgg 240  
cccgagcgg a tggacaagaa gctgctggcc gtgcggccg ccaacaccgt ccgcttccgc 300  
tgcccagccg ctggcaaccc cactccctcc atctcctggc tgaagaacgg cagggagttc 360  
cgccggcagc accgcattgg aggcatcaag ctgcggcattc agcagtggag cctggtcattg 420  
gaaagcgtgg tgccctcgga ccgcggcaac tacacctgctc tcgtggagaa caagtttggc 480  
agcatccggc agacgtacac gctggacgtg ctggagcgct ccccgacccg gcccatcctg 540  
caggcggggc tgccggccaa ccagacggcg gtgctggca gcgacgtgga gttccactgc 600  
aagggttaca gtgacgcaca gccccacatc cagtgctca agcacgtgga ggtgaatggc 660  
agcaagggtgg gcccggacgg cacaccctac gttaccgtgc tcaagacggc gggcgctaac 720  
accaccgaca aggagctaga gttctctcc ttgcacaacg tcaccttta ggacgcccggg 780  
gagttacacct gcctggcggtt caattctatt gggtttctc atcactctgc gtggctgggt 840  
gtgctgccag ccgaggagga gctggtggag gctgacgagg cgggcagtgt gtatgcaggc 900  
atcctcagct acgggggtggg cttttcttc ttcattcctgg tggggcggc tggaccgtc 960  
tgccgcctgc gcagcccccc caagaaaggc ctgggctccc ccaccgtgca caagatctcc 1020  
cgcttcccgc tcaaggcaca ggtgtccctg gagtccaacg cgtccatgag ctccaaacaca 1080  
ccactggtgc gcatcgcaag gctgtcctca ggggagggcc ccacgctggc caatgtctcc 1140  
gagctcgagc tgcctgccga ccccaaatgg gagctgtctc gggcccggtt gaccctggc 1200  
aaggcccccttg gggagggctg cttcgccag gtggtcattgg cggaggccat cggcattgac 1260  
aaggaccggg ccgccaagcc tgcaccgtt gccgtgaaga tgctgaaaga cgatgccact 1320

gacaaggacc tgtcgaccc ggtgtctgag atggagatga tgaagatgtat cggaaacac 1380  
aaaaacatca tcaacctgct gggcgctgc acgcaggcg ggccctgta cgtgctgg 1440  
gagtaacgcgg ccaaggtaa cctgcgggag tttctgcggg cgccggccccc cccgggcctg 1500  
gactactcct tcgacacccg caagccgccc gaggagcagc tcaccccaa ggacctgg 1560  
tcctgtgcct accaggtggc ccggggcatg gagtacttgg cctccagaa gtgcaccc 1620  
aggacactgg ctgcccaca tgtgctgg 1680  
ttcgggctgg cccgggacgt gcacaaccc gactactaca agaagacaac caacggccgg 1740  
ctccccgtga agtggatggc gcctgaggcc ttgtttgacc gagtctacac tcaccaggt 1800  
gacgtctggt cctttgggt cctgctctgg gagatctca cgctggggg ctccccgtac 1860  
ccggcatcc ctgtggagga gctcttcaag ctgctgaagg agggccaccc catggacaag 1920  
cccgccaact gcacacacga cctgtacatg atcatgcggg agtgctggca tgccgcgcc 1980  
tcccagaggg ccaccccaa gcagctgg 2040  
tccaccgacg agtacctgga cctgtcgccg ccttcgagc agtactcccc gggtgccag 2100  
gacacccca gctccagctc ctcaggggac gactccgtgt ttgcccacga cctgctgccc 2160  
ccggccccac ccagcagtgg gggctcgccg acgtgaagg ccactggtcc ccaacaatgt 2220  
gaggggtccc tagcagccca ccctgctgct ggtgcacagc cactccccgg catgagactc 2280  
agtgcagatg gagagacagc tacacagagc tttggctgt gtgtgtgtgt gtgcgtgtgt 2340  
gtgtgtgtgt gcacatccgc gtgtgcctgt gtgcgtgcgc atcttgcctc caggtgcaga 2400  
ggtaccctgg gtgtccccgc tgctgtgcaa cggtccctg actggtgctg cagcaccgag 2460  
gggcctttgt tctgggggaa cccagtgcag aatgtaagtgg 2520  
gtggggcagg gagctgggccc cgacatggct cggcctctgc ctttgcacca cgggacatca 2580  
cagggtgcgc tcggccctc ccacacccaa agctgagcct gcaggaaagc cccacatgtc 2640

cagcaccttg tgcctgggt gtttagtggca ccgcctcccc acctccaggc tttcccactt 2700  
cccaccctgc ccctcagaga ctgaaaattac gggtaacctga agatgggagc ctttacctt 2760  
tatgcaaaag gtttattccg gaaacttagtg tacatttcta taaatagatg ctgtgtatat 2820  
ggtatataata catatatata tataacatata atggaagagg aaaaggctgg tacaacggag 2880  
gcctgcgacc ctgggggcac aggaggcagg catggccctg ggcggggcgt gggggggcgt 2940  
ggagggagggc cccaggggtc tcacccatgc aagcagagga ccagggctt ttctggcacc 3000  
gcagtttgt tttaaaactg gacctgtata tttgtaaagc tatttatggg cccctggcac 3060  
tcttgttccc acaccccaac acttccagca tttagctggc cacatggcgg agagttttaa 3120  
ttttaactt attgacaacc gagaaggttt atccgcgcga tagagggacg gccaagaatg 3180  
tacgtccagc ctgccccga gctggaggat cccctccaag cctaaaaggt tgtaatagt 3240  
tggaggtgat tccagtgaag atattttatt tgctttgtcc ttttcagga gaatttagatt 3300  
tctataggat ttttcttttag gagattttt ttttgactt caaagcaagc tggtattttc 3360  
atacaaattc ttctaattgc tgtgtgtccc aggcagggag acggtttcca gggaggggcc 3420  
ggccctgtgt gcaggttccg atgttattag atgttacaag tttatataata tctatata 3480  
taatttattg agttttaca agatgtattt gttgttagact taacacttct taccaatgc 3540  
ttctagagtt ttatagcctg gactgctacc tttcaaagct tggagggaaag ccgtgaattc 3600  
agttggttcg ttctgtactg ttactgggcc ctgagctctgg gcagctgtcc cttgcttgcc 3660  
tgcagggcca tggctcaggg tggctcttc ttggggccca gtgcattggc gccagaggtg 3720  
tcacccaaac cggcaggtgc gatttgtta acccagcgac gaactttccg aaaaataaaag 3780  
acacctgggtt gctaacctga aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 3829

&lt;210&gt; 11

&lt;211&gt; 924

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> 414

<223> unknown

<221> unsure

<222> 415

<223> unknown

<221> unsure

<222> 416

<223> unknown

<221> unsure

<222> 417

<223> unknown

<221> unsure

<222> 418

<223> unknown

<221> unsure

<222> 419

<223> unknown

<221> unsure

<222> 420

<223> unknown

<221> unsure

<222> 421

<223> unknown

<221> unsure

<222> 422

<223> unknown

<221> unsure

<222> 423

<223> unknown

<221> unsure  
<222> 424  
<223> unknown

<221> unsure  
<222> 425  
<223> unknown

<221> unsure  
<222> 426  
<223> unknown

<221> unsure  
<222> 427  
<223> unknown

<221> unsure  
<222> 428  
<223> unknown

<221> unsure  
<222> 429  
<223> unknown

<221> unsure  
<222> 430  
<223> unknown

<221> unsure  
<222> 431  
<223> unknown

<221> unsure  
<222> 432  
<223> unknown

<221> unsure  
<222> 433  
<223> unknown

<221> unsure  
<222> 434  
<223> unknown

<221> unsure  
<222> 435  
<223> unknown

<221> unsure  
<222> 436  
<223> unknown

<221> unsure  
<222> 437  
<223> unknown

<221> unsure  
<222> 438  
<223> unknown

<221> unsure  
<222> 439  
<223> unknown

<221> unsure  
<222> 440  
<223> unknown

<221> unsure  
<222> 441  
<223> unknown

<221> unsure  
<222> 442  
<223> unknown

<221> unsure  
<222> 443  
<223> unknown

<221> unsure  
<222> 444  
<223> unknown

<221> unsure  
<222> 445  
<223> unknown

<221> unsure  
<222> 446  
<223> unknown

<221> unsure  
<222> 447  
<223> unknown

<221> unsure  
<222> 448  
<223> unknown

<221> unsure  
<222> 449  
<223> unknown

<221> unsure  
<222> 450  
<223> unknown

<221> unsure  
<222> 451  
<223> unknown

<221> unsure  
<222> 452  
<223> unknown

<221> unsure  
<222> 453  
<223> unknown

<221> unsure  
<222> 454  
<223> unknown

<221> unsure  
<222> 455  
<223> unknown

<221> unsure  
<222> 456  
<223> unknown

<221> unsure  
<222> 457  
<223> unknown

<221> unsure  
<222> 458  
<223> unknown

<221> unsure  
<222> 459  
<223> unknown

<221> unsure  
<222> 460  
<223> unknown

<221> unsure  
<222> 461  
<223> unknown

<221> unsure  
<222> 462  
<223> unknown

<221> unsure  
<222> 463  
<223> unknown

<221> unsure  
<222> 464  
<223> unknown

<221> unsure  
<222> 465  
<223> unknown

<221> unsure  
<222> 466  
<223> unknown

<221> unsure  
<222> 467  
<223> unknown

<221> unsure  
<222> 468  
<223> unknown

<221> unsure  
<222> 469  
<223> unknown

<221> unsure  
<222> 470  
<223> unknown

<221> unsure  
<222> 471  
<223> unknown

<221> unsure  
<222> 472  
<223> unknown

<221> unsure  
<222> 473  
<223> unknown

<221> unsure  
<222> 474  
<223> unknown

<221> unsure  
<222> 475  
<223> unknown

<221> unsure  
<222> 476  
<223> unknown

<221> unsure  
<222> 477  
<223> unknown

<221> unsure  
<222> 478  
<223> unknown

<221> unsure  
<222> 479  
<223> unknown

<221> unsure  
<222> 480  
<223> unknown

<223>

<400> 11  
ggacacaggt gtggacacag gtaggagcag ggtccagggt tcaggccagc cggggtgtggg 60  
cccgctgcca ccgccaagcc ctgcccttca caggcaggtg agggactaag ggcccggaac 120  
aacctccctg gggtcacccc gaaggtctgg tcccctcagg atacaggagg ggctgggtca 180  
ctgacatggc tctagatgcc ccaccctggt ggcagggctg gtgtgcaagg ggactccgtg 240  
ttgctgatgg ggagactgag gcacagggcc ctgggggttc caggagcagg aggaggccag 300  
ggctggcctg tggggctctg gtgttgctta taggtgaggt ggaccccgca gacattagcg 360  
cagcagggca gggcactcag gtggctgccc tggggtgat ggacccgggg tgannnnnnn 420  
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480  
caactccctc caagactcct ggctctcaag cgactggct cctctcctgg taacttctcc 540  
caggtcctgc cttgtccact agatggctc ccccctcggt cttcagtctc cccgttggtg 600  
ggcctgtccc tgcacacccc ctctggcag gtgggctccc ctggacaatg ccctgtgccc 660  
tgtgacttca caggtccggg cagagcaccc tggagggag gggaggggac acacggccca 720  
gctctgagaa agccccgggg aggggacaag atgtggaggc tcctgggaac ctcatcccgc 780  
cctttccta cacaggacgg gaaactgagg ctggggatgg gcagggcag ctctgggaag 840  
ggggttgttc agaggggcct ctgctccac tcgggtcatg gccttcacac gcacctcgcc 900

ccgcaggggc cccttactgg acac 924

<210> 12  
<211> 940  
<212> DNA  
<213> Homo sapiens

<220>

<221> unsure  
<222> 639  
<223> unknown

<223>

<400> 12  
cccgacggc acaccctacg ttaccgtgct caaggtggc caccgtgtgc acgtgggtgc 60  
cgccgctggg gctcctggc tggcccaag ggtgcccctt ggctgcgggt tgcgtgagga 120  
tttggatcta ggggttggag cttcgggggc agaagctgtg ggggtgcttg tggggccaag 180  
tctcagccac cccacacccctc agggccatag gcagctgcgt tgggaccctgt ttccgtgtct 240  
gcagagggcc agcctcagcc actgaagtcc ctgacatgga gctgcccacg ggcttcttgg 300  
gggtgggtgc ggtttggca gcagtgggtgc cccaggacag gagggcagtg tggccaagcc 360  
ctccaggccc cctcttggcc tcagaggcgg tggttgagcc ccgacctggc cgattgggtc 420  
tcgtcagctg tgtgcagtg ggcccgagct cactgtctgc ccgcctcctg aagcccttag 480  
ctttgttccc attgctgccg ggtgggggcc actgaattgg gacggttgcg acactcaaag 540  
cccaaagaga aacatctgtt cagagagaag acggctcttt gggggcgggg agcaggcgca 600  
gggcgagggt ggagtccaga ccccgcccag agaggccgnc tcgggcccctg tccagggtgc 660  
aggttctgca agagcccgaa ggagggcagg ccagtacca gaggttgtgt gagggtctgg 720  
gctgggttgt tggggtggag gcagagacgt tcatcctgtg aaaccacagc caccgtgaag 780

tgactccacg actcctccag gcagccttg gggctgacgc agcccagcct cgatctgtac 840  
cttgggggtc tcccacatcc tgccctcggtgc ccggcgggct gcctcggggg cgtgcttgag 900  
ccgggtctct tgcctccgca gtcctggatc agtgagagtg 940

<210> 13  
<211> 662  
<212> DNA  
<213> Homo sapiens

<220>

<400> 13  
ggcccccggc aggttaacgac tctgtcccat gccggccggc acaagagctc cagctccaag 60  
gccctggccg cgcgccctgc acgccccgca cgcccccagcc ctgctcgctc ccgccccggc 120  
tcgcgctcca ctcggggccg cctcggaag gctggcagct ccagcctcca cggtgaccgc 180  
ccgcttcgag ccctgtggcc tgccggacc cttcccgac gcctgcgacc cccacaggag 240  
gtgccccggtg cccaccgggc cggctccgtg ccgtctgtga gcaccccttt gcgcctctct 300  
ccacccctgc ccgctgcctg ctcgcttccg cagcctgtgt gtaccctgtg tccatcctcc 360  
acctgcaccc gcccggctct gcgctaaccg gcatgctgac tgcccgctg ccgctcacct 420  
gggacagagg actcgccggt ggaggggcct ggcttcgggc tcagtaccgg tgtaccaggc 480  
ggagggccct caaccgcgtg gcggtgacca agttgacgat ggctgaggag ttgggtgggg 540  
ccgcgttttc cttgcagcgg ctggatcctg ccgtgtggac tctgtcggt gcccgcagg 600  
cggtgctggc gctcgccat cgctctgctc tctctttgtta gacggcgggc gctaacacca 660  
cc 662

<210> 14  
<211> 343

<212> DNA

<213> Homo sapiens

<220>

<400> 14

ttcccgctca agcgacaggt aacagaaaagt agataccagg ttctgagctg cctgcccggc 60

aggcctcctg gagccccacc tcgggccacg ctggtcctgg gctgtgtgag ccctctctgc 120

agccaggcgg gctccctct cctcgctct gctcaccatg tagagcctag ggtactttgg 180

ggcacgaaac attctaaaaa tcttcattca atgctggtgg aagtcagaac gccccccctt 240

ctggcccagc actgacccccc ggctgtaccc ccacgcctg tcgcccacgc ggccccaacc 300

tgccctgct gacccaagca ggtgtccctg gagtccaaacg cgt 343

<210> 15

<211> 248

<212> DNA

<213> Homo sapiens

<220>

<400> 15

cactcaccag agtgacgtgt acgtgtcctg cagagctcag gttcaggggg tggaggcggg 60

aactggcag agccaggacc ccagctgcag tccccaggcc tgcctgg agctcctggg 120

tgtggttct acccctccct gggggcagca ggcgcagacct ggcctattac ccctgggcc 180

cgcccagggtg tctgtcctgg gagtctcagg acagcctgac ctcacccctcc cctgttagctg 240

gtccctttg 248

<210> 16

<211> 171

<212> DNA

<213> Homo sapiens

&lt;220&gt;

&lt;400&gt; 16

tgcacacacg acctgtgagt ggcacccctg accctccact gggccctcag gggggggat 60  
ccctccgggg ctgggcgggg gagggactgg cagcccttca ggctgttccc gaataaggcg 120  
ggaaggcgccg ggactcaactc ctgagcgccc tgcccgcagg tacatgatca t 171

&lt;210&gt; 17

&lt;211&gt; 5233

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;400&gt; 17

ggcgagcggc aggttaagaag ggacccacta ggcacggag aggccggccc gtgcgggcag 60  
aggcgttggg gacgggaacc ggccccgggt cggaggggccc gccgggtgtg agtacgccc 120  
cggggtaga gcccggattc cgctgcctcc ttgccggaga ggcggccag agctagcg 180  
gcgacttgtg gtgcgcccgg agccgcagct accctccaag tgcgaggcca ccacggggag 240  
ccaggctggg ggttggcgtc cgcaaaaaaa atcccctgcg actcccttagc cctggctgt 300  
cgggagggcg cggggggccc catttccacg attcccgctg ttgttattcg ggttctgcgc 360  
agacggaaag ttcccattgt tggcgcccc ctccccggg ccccaagtttgc tggccagctt 420  
cagccaaggc gagagaccgg acttctaagg gtgggtgtgc gcgtcagcga agcccgccc 480  
ctgccccccc gaagaggcag cagcctccag cgtccccgct gccgaccctg cccctgcctg 540  
ggggccgagg gcgcattcccc gtgggtgcgc gccgagctcc aggcaagcga gggggcggtg 600  
tcccaagcgtc gcggggcccta gactgggctg gcggccagg tcccgccggga cgtcgagggt 660  
ctgaagggag gtcccaaggc gcgaggggag gggaaaggcgc gccccggccgg acctgcacac 720

gccccgggt tcctcggtgg ccggggcgag agctccggtg ccggccgcgc gtacacccgc 780  
tgccggctcc ggacgggcga gggggggcgcg cacagctcag cccggcggcc gcgccggaggg 840  
aggccttggc ccggtgagct cgcccccac ccggggccag gcccgaacag ccgccttcttt 900  
gtacctcgac gcggccacag accgcgcatt gatggccgct cggcggctcg cggggaggtg 960  
tgagcgaccg cgggcgcggc gggccgggga gggcgcctgg agggccgagg cagatggcgt 1020  
ccgccccgcc cgcccccggc cgccctttc tccgtcggcg gctgcagcct cccggaacaa 1080  
tgtcattttttttatgaatg aaagtggccc ggcgcattgaa tgtgcgtgtc attcagcggc 1140  
gtgacagggg ccttcgggag gtcagcgcgc gcttttagcg tctgctcggg cggcccccgt 1200  
tccaggggtg cccggggggc gggccggggg ggagcttggc ttccgcattc tcattcagat 1260  
aaagatatta ctccctacgg cccgggaatg tcagccagcc ccggggaaagg gcggcggcca 1320  
ggctgcggag ccttcctgg accccctgcg ggcgcgcggg gcctcccca gtcgctcctg 1380  
gaacgccccg cccacccctc cccggggggc ggcgcgcgc ccgcactgga gctggtgaaa 1440  
caggttgta gttgatcggt caataaactt aatccggttc cttaacaaga tggggccggc 1500  
agtaaaaata caaagacctc gtgaaatgga ctgaggtcta ggctggcgct tgcccgaa 1560  
cataaattat ggagccttgg ctgcagggg tcaagggcg tgggaaaggt tttggccact 1620  
ggactgcctt ggccacccca ggcctgcca ggacagcccc catctccca gggggccgta 1680  
ttcctgggttgg gacactggag tgaccccca gggtgcaggg aggtagacaa ggtcggtct 1740  
cccacagtcc cacccaccc agcaggggtc tgggggtgca gggccttcc cgaagggtct 1800  
ggctgcaacc tcccccaactc ctcccttgca gggctggact ttgagccgcg tggccctctg 1860  
ggtggttcat taacctgggc tgagcctggc ctccaggtcc ttgtgtgagc ctaggaaccc 1920  
cttgttaccc acccccccagc tccccagccc tcaggtctca cttggggctca gatctggggc 1980  
tgccggcaccc cttgttacag ctgagcttga gtgggagccc agggggcttgg ggtctcctgg 2040

aggacgggga tctaaagtca cctcatctag ggagggcatgc agccctcacc tgaatgattc 2100  
aggagtgaat gagccaggag tggagccacc tttgggtgggg taggggtcag cctggacctc 2160  
taggctgcca gctcaggctc gggtgccctc ttcaacccctc agtttccctta cctgtccaag 2220  
agaaccgata atggcaggct gtttgaagga ttaggccaga taaccctggc aagcccttt 2280  
tagcctgccc agcctccaga tccctttttt ccggacttta ttgtgaaact ccaggtgggg 2340  
agacagggag gctggacttt tgggggcccc ctcctcttag gctattttat agtccttacc 2400  
tggcaataacc tcctgtaccc cagagagctg cagagaactt catgtgcattc cgaaaccaga 2460  
atgtgttgtt tcctgacccc aggccctcat ctcaccccaa aacccaaata aacccctggg 2520  
gcagccagct ccggaagcga gtctggattt gatccttgtt ctctgggtc aaccggaggg 2580  
gcttatgatg gagcaaggct ccccatcct ctcagccatg ctccctcaca tgcactggc 2640  
ctccactgca gagaccaga gcctggagaa aggtttccca gccagagtt tggccgtccc 2700  
cagcaccctg cctaattggac atcagtcttg gggccagaga cccagggcag ggagcgcctc 2760  
tcacccctac ctcactcct gcagccattt cagggcctgg tgccctccct gagctcctgg 2820  
gcctgtgggg tgggatttt actttgtgcc acagtggggg aaactgaggt acaggaccag 2880  
tgagtggcag agttgtggag actctggac acagcagagg gctgtcggt gcatgtggag 2940  
cccaagttga ggtcgccact gtgtgggtt gggcgccgg caggagcacg tttgtggga 3000  
tccatagaag ggtgggaggt gggacgcgtt gcctcctacc ccgccttggg tacagcagga 3060  
gttttgcctc caacgtgttt gggcaccagt gtctgtgtgg tgcgtggg gcctccctt 3120  
tgtggatcaa gaaagaaaga acccttccta gggctgctgg gggctatag ctctcccat 3180  
gcctggcagc tgggtgggtt atggggcgtc caccaactg ctgacttccc agtggagtc 3240  
agaccctgaa cttatagcac ccactcatgc cccgtgtcac actgtccttc acctgggtc 3300  
cgccacccag cccctgctgg ggtaccctgg cctctgctgg cacctagcag gcaggcagtg 3360

ggggggggcag tcagggctgc accctccccca ccacacacgg gcagatggcc actggtgtgg 3420  
ctggcctggg gctgctgtgt cccccgtccc cccgtgctgg accaggctga agcaaatact 3480  
tgtgtggatg gcttgacctg ttgtcgccac tcagaccaaa ccggAACCAA ccggctgttg 3540  
cccttgggcc agggcctgca gctgaggctg ccataaccag cctgttctcg gccttctggg 3600  
gggcctcgag cagctccag ctctgggtgg tccccacaag acactggcca ggaccggagg 3660  
gctggaggc aggccaggag ccccccgtac tgccccgtcc ctacaggggc agtccttgag 3720  
ctgtgggtcc ctgtggggcg agggctcctt cggatgcttc agggatgag tgtggccct 3780  
tctggctggc agggtcaccc tggcactag gcgtgtgtgg ctggatcagg tgggttggc 3840  
agaagagggc ctggccgggc agccagggac tggtgtggcc agagtggca gctggggccc 3900  
cgaatctagg ccacgcgtct gcagaatgac aagtgtatggc gcaacccggc cagctgggtc 3960  
tgaagaagga ggctgcctgg gggaccaccc acccccgtcc cggccccaaag cccgggacgc 4020  
ctgcctgcat gcattgtctg gccctggcag ggaaggctag gggcgattgt ccccccagcc 4080  
ctgccccatgg tgtgtcccttg ggtcacagggc tttgggtggct ctggggagct gggcagctac 4140  
tggggaggga cccagggggcc acctgcacat ctgccccgtt ggggtggggccc ccaccccgac 4200  
ttctcagccc ccaggggaggg gcaagggtcg ctgacactgcc ctggctctca cagttcctg 4260  
cccccagcct ggtcgtcctc tgtgaggggg ccccagtcctt ccctgcagggc agcaggactc 4320  
caccccccgg ccccccttgag ggcccgctg ggcctccccca ctccccggcc tgtgagaccc 4380  
acttggccgg acccagcgcc gtgtttgtac tttgctcttc tcggatgttt ttccgtcatg 4440  
accgcccgtgt ggagcttcca taggagctgc aggatacaga accttgccca ccccaaggag 4500  
cccccaccaccc cggcccgccccc ccctcgcgct gctccggcct gtgctctgac cggtaaccc 4560  
gcgcatcgcc ccccaaggaccc tccacacggc cacgtgaccc tgcacccctt tccttctcg 4620  
ctgttctgtt ccctggctgtt ccacatgttac tgctttttagt gctcatatgg ggtgcggggg 4680

ctactgagga cggaccctc ctggggtgaa tctgcaccac gagggggctg gctggccaac 4740  
cctggcaccc ctctgagctc catttcagtc agaggccagc aaagggcagc ctgtccccctt 4800  
tgcccgcagc acctgcccgt cgtggtgccg cctgtgagac aagcatggat tttatgtttc 4860  
caagcaattg aacaaattaa aagaacgaag agtcacattt tgtgacactt tgagatttga 4920  
attctccgtg tccatgagtg aagcatcatg gggccactgc tgtggggttg gctgcaggtt 4980  
gtgtgggaa ggcggctgtc acaccgaggc agaccggagt cttgggaca gactggttgg 5040  
caaagctgaa gatagagacc tttggccctt ttgggacaca gtttccagcc cctggctctgg 5100  
tgggaccctg gatctgggtc agagccttcc tcactcaggg ccgcccggc ttccactgct 5160  
gtgtctgtaa acggtgccgg gtttgggggt gcctgcctca tggttgcccc tcttccccac 5220  
agaagtcccg ggc 5233

<210> 18

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 18

gcggcgtcct caggcagcgc

20

<210> 19

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 19  
gaggcgccgg ccacgatggc

20

<210> 20  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 20  
cgcacactga agtggcacag

20

<210> 21  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 21  
tcccgaggat ggagcgtctg

20

<210> 22  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 22  
cttcgtcatc tcccgaggat

20

<210> 23

<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 23  
gtccacacct gtgtcctcag

20

<210> 24  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 24  
ccgctcgggc cgtgtccagt

20

<210> 25  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 25  
cttcagccag gagatggagg

20

<210> 26  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 26

gcgtgtacgt ctgccggatg

20

<210> 27

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 27

cttgcagtgg aactccacgt

20

<210> 28

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 28

gccccaccttg ctgccgttca

20

<210> 29

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 29

ccccgtagct gaggatgcct

20

<210> 30  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 30  
acctgtcgct tgagcgggaa

20

<210> 31  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 31  
aggagtagtc caggccccggg

20

<210> 32  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 32  
gttgtgcacg tcccgggcca

20

<210> 33  
<211> 20  
<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 33

gtggcccttc acgtccgcga

20

<210> 34

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 34

gggaccgcctc acattgttgg

20

<210> 35

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 35

acgcggatgt gcacacacac

20

<210> 36

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 36  
cccagaacaa aggcccctcg

20

<210> 37  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 37  
ccgagccatg tcgggccccag

20

<210> 38  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 38  
agcgcaccct gtgatgtccc

20

<210> 39  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 39  
tacacagcat ctatttatacg

20

<210> 40  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 40  
taccaggcctt ttccctttcc

20

<210> 41  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 41  
gtcgcaggcc tccgttgtac

20

<210> 42  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 42  
cctgtgcccc cagggtcgca

20

<210> 43  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 43

gggcccataa atagctttac

20

<210> 44

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 44

ggttgtcaat aagttaaaaa

20

<210> 45

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 45

cttggccgtc cctctatcgg

20

<210> 46

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 46

aaaatatctt cactggaatc

20

&lt;210&gt; 47

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Antisense Oligonucleotide

&lt;400&gt; 47

tctcctgaaa aaggacaaag

20

&lt;210&gt; 48

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Antisense Oligonucleotide

&lt;400&gt; 48

atttgtatga aaataccagc

20

&lt;210&gt; 49

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Antisense Oligonucleotide

&lt;400&gt; 49

cctgggacac acagcaatta

20

&lt;210&gt; 50

&lt;211&gt; 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 50

catcggacc tgcacacagg

20

<210> 51

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 51

tccaaagcttt gaaaggtagc

20

<210> 52

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 52

atggccctgc aggcaagcaa

20

<210> 53

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 53

accatgcact gggccccaag

20

<210> 54

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 54

aggtgtcttt atttttcgga

20

<210> 55

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 55

gttagcaacc aggtgtcttt

20

<210> 56

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 56

tggaccctgc tcctacctgt

20

<210> 57  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 57  
ggagcagagg cccctctgaa

20

<210> 58  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 58  
gcttggccac actgccctcc

20

<210> 59  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 59  
acagatgttt ctctttgggc

20

<210> 60  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 60

gcccccaaga gaccgtcttc

20

<210> 61

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 61

gcgggttagc gcagagccgg

20

<210> 62

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 62

cacggcagga tccagccgct

20

<210> 63

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 63  
gctccaggag gcctggcgaa

20

<210> 64  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 64  
aggtagggc aggctgtcct

20

<210> 65  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 65  
aggatgcca ctcacaggc

20

<210> 66  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 66  
cgccgggctg agctgtgcgc

20

<210> 67

<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 67

ccgcgtcgag gtacaaagaa

20

<210> 68  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 68

ggagacccca agcccctggg

20

<210> 69  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 69

cctcggttg accccagaga

20

<210> 70  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 70

gtgaccctgc cagccagaag

20

<210> 71

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 71

cagtagcgc tgcgtaggcc

20

<210> 72

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 72

actgaagtgg cacagtaacgc

20

<210> 73

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 73

gcggccggca cggccagcag

20

<210> 74  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 74  
ccaggttcca ctgctgatgc

20

<210> 75  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 75  
atgctgccaa acttgttctc

20

<210> 76  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 76  
gccggatgct gccaaacttg

20

<210> 77  
<211> 20  
<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 77

ggtgtgccgt ccggggccac

20

<210> 78

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 78

ctagctcctt gtcggtggtg

20

<210> 79

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 79

gaacctctag ctccttgcg

20

<210> 80

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 80  
accagccacg cagagtatg

20

<210> 81  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 81  
gcaccaccag ccacgcagag

20

<210> 82  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 82  
cgccaccacc aggatgaaca

20

<210> 83  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 83  
gcttggcgcc ccggtccttg

20

<210> 84  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 84  
tggccgcgta ctccaccaggc

20

<210> 85  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 85  
gagctgctcc tcggggcggtc

20

<210> 86  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 86  
cgtcggtgga cgtcacggta

20

<210> 87  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 87

tgcaaaggc agaggccgag

20

<210> 88

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 88

gtcccggtt gcaaaggcag

20

<210> 89

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 89

aggctcagct ttgggtgtgg

20

<210> 90

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 90

tccccatcttc aggtaccacgt

20

&lt;210&gt; 91

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Antisense Oligonucleotide

&lt;400&gt; 91

atatatatgt atatataccca

20

&lt;210&gt; 92

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Antisense Oligonucleotide

&lt;400&gt; 92

tctccctgcc tgggacacac

20

&lt;210&gt; 93

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Antisense Oligonucleotide

&lt;400&gt; 93

tgttaagtct acaacaaata

20

&lt;210&gt; 94

&lt;211&gt; 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 94

gctgcccaaga ctcagggccc

20

<210> 95

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 95

acaaaatcgc acctgccggt

20